

Application No. 10/690,992
Amendment dated October 23, 2006
Reply to Office Action of July 12, 2006

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Docket No.: 60130(71987)

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for extracting antineoplastic components obtaining an extract from *Bupleurum scorzoniferifolium*, wherein the extract comprises antineoplastic components, the method comprising the steps of:
extracting a lignan mixture from *Bupleurum scorzoniferifolium* wherein the lignan mixture further comprises at least one antineoplastic component; and
isolating a pure *Bupleurum scorzoniferifolium* extract from the lignan mixture
dissolving *Bupleurum scorzoniferifolium* powder using an acetone solution to obtain an acetone extract and residues;
dissolving the acetone extract in a protic solvent solution and extracting the protic solvent solution with a nonpolar organic solvent, to obtain a nonpolar organic solvent extract and a protic solvent portion; and
dissolving the protic solvent portion in an aqueous solvent and extracting with a polar organic solvent to obtain a polar organic solvent extract and an aqueous portion.
2. (Canceled)
3. (Currently amended) The method of claim [[2]] 1, wherein the first solution is acetoneprotic solvent solution is 95% methanol/5% water.
4. (Currently amended) The method of claim [[2]] 1, wherein the second solution is methanolaqueous solvent is water.
5. (Currently amended) The method of claim [[2]] 1, wherein the third solution is 95% methanol solutionnonpolar organic solvent is hexane.
6. (Currently amended) The method of claim [[2]] 1, wherein the fourth solution is chloroformpolar organic solvent is chloroform.

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7. (Currently amended) The method of claim [[2]] 1, further ~~comprises comprising~~ the step of separating the antineoplastic components from the acetone extract, the nonpolar organic solvent extract, and the polar organic solvent extract by a chromatographic method for separating antineoplastic components.

8. (Original) The method of claim 7, wherein the chromatographic method is a silica gel chromatography

9. (Original) The method of claim 7, wherein the chromatographic method is a high performance liquid chromatography (HPLC).

10. (Original) The method of claim 7, wherein the chromatographic method is a medium pressure liquid chromatography (MPLC).

11. (Canceled)

12. (Currently amended) The method of claim 1, wherein the cell proliferative disorder ~~includes the~~ antineoplastic components have anti-tumor effects on hepatoma.

13. (Currently amended) The method of claim 1, wherein the ~~antineoplastic components have anti-tumor effects on~~ cell proliferative disorder includes ovarian cancer.

14. (Currently amended) The method of claim 1, wherein the ~~antineoplastic components have anti-tumor effects on~~ cell proliferative disorder includes malignant glioblastoma.

15. (Currently amended) The method of claim 1, wherein the ~~antineoplastic components have anti-tumor effects on~~ cell proliferative disorder includes lung cancer.

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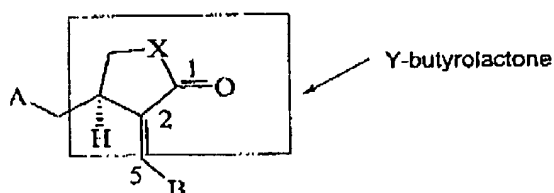
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16. (Currently amended) The method of claim 1, wherein the antineoplastic components have anti-tumor effects on cell proliferative disorder includes colorectal cancer.

17. (Currently amended) The method of claim 1, wherein the antineoplastic components have anti-tumor effects on cell proliferative disorder is tumors which are resistant to a taxane-type anticancer agent.

18. (Original) The method of claim 17, wherein the taxane-type anticancer agent is Paclitaxel.

19. (Withdrawn) The method of claim 1, wherein the antineoplastic components comprise at least one of the following heterocyclic compounds or pharmacologically compatible salts, esters, ketones or derivatives based on the following formula:



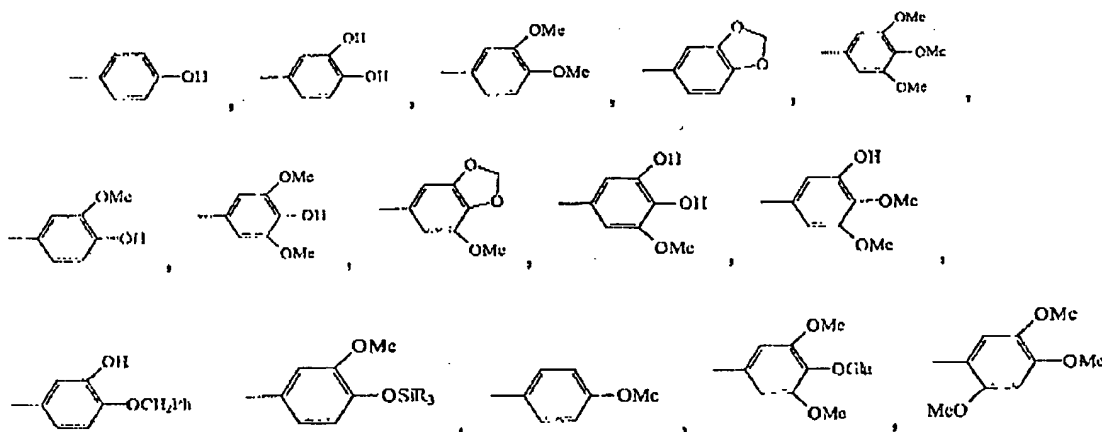
wherein X includes N, O, S, and Se.

20. (Withdrawn) The method of claim 19, wherein A, B substituents can be selected from the following substituent structures:

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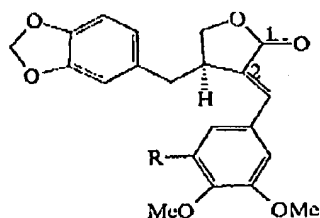
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21. (Withdrawn) The method of claim 19, wherein the heterocyclic compounds have a Z configuration at a carbon 2(5) position.

22. (Withdrawn) The method of claim 19, wherein the heterocyclic compounds have a E configuration at a carbon 2(5) position.

23. (Withdrawn) The method of claim 19, wherein the heterocyclic compound having the following formula is named chailulactone:



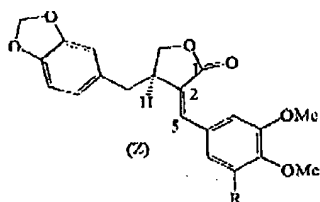
where R represents a methoxyl group.

24. (Currently amended) The method of claim [19] 1, wherein the antineoplastic compounds comprise a the heterocyclic compound having the following formula: is named isochailulactone:

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where R represents a hydrogen atom, a methoxyl group, or an aromatic group.

25. (Currently amended) The method of claim 1, wherein the antineoplastic components is an agent for ~~arresting~~arrest a G2/M stage of a cell cycle.

26. (Currently amended) The method of claim 1, wherein the antineoplastic components stabilize ~~is~~ a microtubule-stabilizing agent.

27. (Currently amended) The method of claim 1, wherein the antineoplastic components are ~~is~~ used in conjunction with an anti-tumor drug.

28. (Currently amended) The method of claim 27, wherein the anti-tumor drug includes is Cisplatin.

29. (Currently amended) The method of claim 27, wherein the anti-tumor drug includes is Taxol.

30. (Currently amended) The method of claim 1, wherein the antineoplastic components is an agent for ~~down-regulating~~regulate human telomerase reverse transcriptase (hTERT) gene.

31. (Currently amended) The method of claim 30, wherein the antineoplastic components down regulate~~regulates~~ hTERT gene in human immunodeficiency virus (HIV).

32. (Currently amended) The method of claim 1, wherein the antineoplastic components is an agent for inhibiting telomerase activity.

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33. (Currently amended) The method of claim 32, wherein the antineoplastic components inhibits inhibit telomerase activity in [[the]] HIV.